

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE  
(REV. 7-2005)

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER

14321.90

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

**10/587818**

INTERNATIONAL APPLICATION NO.  
PCT/JP2005/001599

INTERNATIONAL FILING DATE  
February 3, 2005

PRIORITY DATE CLAIMED  
February 3, 2004

TITLE OF INVENTION  
AVALANCHE PHOTODIODE

APPLICANT(S) FOR DO/EO/US

Tadao Ishibashi      Yukihiro Hirota  
Seigo Ando

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☒ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☒ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☒ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☒ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☒ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 23 below concern document(s) or information included:

13. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☐ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☒ Express Mail Label No.      EV 825 902 572 US

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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The fee is \$250 for each additional 50 sheets of paper or fraction thereof. </td> <td colspan="2"></td> </tr> <tr> <td>Total Sheets</td> <td>Extra Sheets</td> <td>Number of each additional 50 or fraction thereof (round up to a whole)</td> <td>RATE</td> <td colspan="2"></td> </tr> <tr> <td>- 100 =</td> <td>0</td> <td>/50 = 0</td> <td>x \$250.00</td> <td>\$ <b>\$0.00</b></td> <td></td> </tr> <tr> <td colspan="4">Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).</td> <td colspan="2">\$</td> </tr> <tr> <td>CLAIMS</td> <td>NUMBER FILED</td> <td>NUMBER EXTRA</td> <td>RATE</td> <td colspan="2"></td> </tr> <tr> <td>Total claims</td> <td>3 - 20 =</td> <td>0</td> <td>x \$50.00</td> <td>\$ <b>\$0.00</b></td> <td></td> </tr> <tr> <td>Independent claims</td> <td>1 - 3 =</td> <td>0</td> <td>x \$200.00</td> <td>\$ <b>\$0.00</b></td> <td></td> </tr> <tr> <td colspan="4">MULTIPLE DEPENDENT CLAIMS (if applicable) <input type="checkbox"/> + \$360.00</td> <td colspan="2">\$ <b>\$0.00</b></td> </tr> <tr> <td colspan="4"><b>TOTAL OF ABOVE CALCULATIONS =</b></td> <td colspan="2">\$ <b>\$900.00</b></td> </tr> <tr> <td colspan="4"><input type="checkbox"/> Applicant claims small entity status. 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34 OMB-350 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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- AP20 Rec'd PCT/PTO 28 JUL 2006
- a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 23-3178. A duplicate copy of this sheet is enclosed.
- d. ☒ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

WORKMAN NYDEGGER

022913

PATENT TRADEMARK OFFICE  
CUSTOMER NO.

  
SIGNATURE

Dana L. Tangren

NAME

37,246

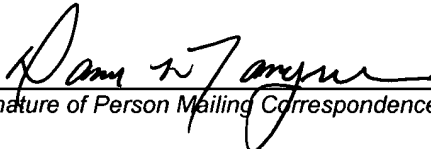
REGISTRATION NUMBER

July 28, 2006

DATE

AP20 Rec'd PCT/PTO 28 JUL 2006

10/587818

<b>CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)</b>				<b>Docket No.</b> 14321.90	
Applicant(s) Tadas Ishibashi, Seigo Ando, and Yukihiko Hirota					
Serial No.	Filing Date	Confirmation No.	Customer No.	Examiner	Group Art Unit
			022913		
Invention: AVALANCHE PHOTODIODE					
<p>I hereby certify that the following are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Mail Stop: PCT, Commissioner for Patents, PO Box 1450, Arlington, Virginia 22313-1450.</p> <p>DATED this 28<sup>th</sup> day of July 2006.</p> <ul style="list-style-type: none"><li>• Transmittal Letter concerning filing under 35 USC § 371 (3 pages) (in duplicate)</li><li>• A copy of PCT/JP2005/001599</li><li>• Application Data Sheet (4 pages)</li><li>• English translation of PCT/JP2005/001599 with Verification of Translation (27 pages)</li><li>• Drawings (6 pages)</li><li>• Copy of International Search Report (4 pages)</li><li>• Form PTO-2038 submitting Credit Card Payment in the amount of \$900</li><li>• Transmittal for Information Disclosure Statement (3 pages)</li><li>• Information Disclosure Statement (3 pages)</li><li>• Form PTO-1449 listing 5 references (2 pages)</li><li>• Copy of 4 Non-US references</li><li>• Postcard</li></ul> <p>DANA L. TANGREN</p> <p>(Typed or Printed Name of Person Mailing Correspondence)</p> <p> (Signature of Person Mailing Correspondence)</p> <p>EV 825 902 572 US</p> <p>(“Express Mail” Mailing Label Number)</p>					

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AP20 Rec'd PCT/PTO 28 JUL 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re International Application of

Tadao ISHIBASHI et al

International Application No.: PCT/JP2005/001599

International filing date: February 3, 2005

For: AVALANCHE PHOTODIODE

VERIFICATION OF TRANSLATION

Honorable Commissioner of Patent and Trademark

Washington, D.C. 20231

Sir:

Chikao NAGASAKA residing at c/o TANI & ABE, No. 6-20, Akasaka 2-chome, Minato-ku, Tokyo 107-0052, Japan, declares:

(1) that he knows well both the Japanese and English languages;

(2) that he translated the claims of the above-identified International Application from Japanese to English;

(3) that the attached English translation is a true and correct translation of the claims, specification and drawings of the above-identified International Application to the best of his knowledge and belief; and

(4) that all statements made of his own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 USC 1001, and that such false statements may jeopardize the validity of the application or any patent issuing thereon.

July 25, 2006

Date

*Chikao Nagasaka*

Chikao NAGASAKA